Package 'ourdata'

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Type Package

Title Functions and Data frames

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Description Functions and Data frames used in the Technical Applications & Data Analytics course in the study of Gamedesign & Management and Audio-Visuelle Medien at Hochschule Fresenius University of Applied Sciences in Cologne (2021).

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Encoding UTF-8

LazyData true

Depends R (>= 2.10)

R topics documented:

`combine` *Combines two Lists*

Description

'combine' combines two data frames. In each data frame must be an equal (matchable) identifier and two lists containing numeric values.

Usage

```
combine(id, foreign_key, list1, list2, ...)
```

Arguments

`id`	matching point of the left list.
`foreign_key`	matching point of the right list.
`list1`	numeric values of the left list.
`list2`	numierc values of the right list.
`...`	further arguments passed to or from other methods.
`col1`	a name of the id column / variable.
`col2`	a name of the list1 column / variable.
`col3`	a name of the list1 column / variable.

Examples

```
library(ourdata)

# combines two data frames
combined_list <- combine(imr$name, hdi$country, imr$value, hdi$hdi)

## With column names spezified
combined_list <- combine(imr$name, hdi$country, imr$value, hdi$hdi, col1 = "Country", col2 = "IMR", col3 = "HDI
```

`fragebogen` *Data from a survey of GD and AVM courses, contains the head circumference and other features!*

Description

Data frame with the head circumference and other features, containing

- 'alter' Age -> num 16 - 99 (years)

- 'geschlecht' Sex -> num 1 (female), 2 (male), 3 (divers)

- 'note_mathe' Last math grade -> num 1 - 6 (German grading system)

- 'note_annahme' Expected grade in the Technical Applications & Data Analytics course -> num 1 - 6 (German grading system)

- 'kopf' head circumference -> num 40 - 70 (cm)

- 'angst' Fear of the course -> num 1 - 6 (1 high, 6 low)

- 'interesse' Interest in the topic -> num 1 - 6 (1 high, 6 low)

- 'praxis' Desired practical part in the lectures -> num 10 - 90 (percent)

Usage

```
fragebogen
```

Source

The data was self generated from a survey in the course Technical Applications & Data Analytics in the study of Game Design & Management and Audio-Visuelle Medien (5th semester, 2021) at Hochschule Fresenius University of Applied Sciences in Cologne.

Examples

```
library(ourdata)

print(fragebogen)
```

---

hdi *Human development index!*

Description

Data frame contains human development indexes from

Usage

```
hdi
```

Source

The data was downloaded from: https://worldpopulationreview.com/country-rankings/hdi-by-country

Examples

```
library(ourdata)

print(hdi)
```

---

imr *Infant mortality rates!*

Description

Data frame contains infant mortality rates from

Usage

```
imr
```

Source

The data was downloaded from: https://www.cia.gov/the-world-factbook/field/infant-mortality-rate/country-comparison

Examples

```
library(ourdata)

print(imr)
```

---

kirche *Church exits in Germany from 2017 to 2020!*

Description

Data frame contains church exits in Germany from 2017 to 2020 from

Usage

```
kirche
```

Source

The data was downloaded from: https://de.statista.com/statistik/daten/studie/4052/umfrage/kirchenaustritte-in-deutschland-nach-konfessionen/

Examples

```
library(ourdata)

print(kirche)
```

koelsch *Colgone brewed beer (Koelsch) consumption from 2017 to 2020!*

Description

Data frame contains Colgone brewed beer (Koelsch) consumption from 2017 to 2020 from

Usage

```
koelsch
```

Source

The data was downloaded from: https://de.statista.com/statistik/daten/studie/172265/umfrage/haeufigkeit-konsum-von-koelsch/

Examples

```
library(ourdata)

print(koelsch)
```

ourdata *Data frames and functions*

Description

Data frames and functions of the Technical Applications & Data Analytics course. The data contains

- 'fragebogen' Head circumference and other featrues of the GD und AVM courses

- 'hdi' Human development index

- 'imr' Infant mortality rates

- 'kirche' Church exits in Germany from 2017 to 2020

- 'koelsch' Colgone brewed beer (Koelsch) consumption from 2017 to 2020

Functions of the course contains

- 'combine(id, foreign_key, list1, list2, ...)' Combines two data frames.

- 'ourddata()' Prints a welcome message.

- 'plotter(...)' Plotting data with a menu to choose different plotting types.

- 'tminer(x, ...)' A simple text miner.

- 'transformer(x, ...)' Transforms char type values in numeric values.

- 'translate(x, target_lang)' Plotting data with a menu to choose different plotting types.

Usage

```
help(ourdata)
```

Examples

```
library(ourdata)

# Data frames
print(fragebogen)
print(hdi)
print(imr)
print(kirche)
print(koelsch)

## Functions
help(combine)
help(plotter)
help(tminer)
help(transformer)
help(translate)
```

`plotter` *Plotting data*

Description

'plotter' is plotting data with a menu to choose different plotting types.

Usage

```
plotter(...)
```

Arguments

`no args`	without any arguments, 'plotter' will take you through a menu to find out what you want and with which
`...`	further arguments passed to or from other methods.
`x`	data which should be used.
`y`	more data e.g. for correlation analysis.
`plot_type`	choose a plotting type. `Ba` for a (Ba)arplot. `Bo` for a (Bo)xplot.

D for a (D)ensity Plot.
He for a (He)atmap.
Hi for a (Hi)stogram.
L for a (L)ine Plot.
P for a (P)airs Plot.
Q for a (Q)qplot Plot.
S for a (S)catter Plot.
V for a (V)enn Diagram.

header choose a header for the plott.

regline logical, a regression line will be printed.

language e.g. 'DE' for German or 'EN-GB' for British English. There are much more languages supported, let the

pdf logical, indicating whether or not output of plots should be exported to a PDF file (on devices without a g

verbose logical, indicating whether or not plotting details should be printed in console.

Examples

```
library(ourdata)

# It will ask you for all data and information
plotter()

## With x data
plotter(subset(fragebogen$alter)

### With x & y data, plot_type, header, regline, language and verbose option set
plotter(subset(fragebogen, select = alter), subset(fragebogen, select = kopf), plot_type = "S", header = "Alter
```

---

tminer *Text mining*

Description

'tminer' is a text miner.

Usage

```
tminer(x, lang)
```

Arguments

x text data which should be analysed.

lang text will be passed to deepl and translated to given language e.g. "EN" for English.

Examples

```
library(ourdata)

# Text will be translated to English
tminer(x, translate = "EN")
```

`transformer` *Transforms values*

Description

'transformer' converts values of type char to numeric, e.g. 'female' to '1' and 'male' to '2'.

Usage

```
transformer(x, ...)
```

Arguments

`x`	vector which contains the values of type char.
`...`	further arguments passed to or from other methods.
`verbose`	logical, indicating whether or not transformation details should be printed in console.

Examples

```
library(ourdata)
library(pradadata)

# converts a vector
trans_data <- transformer(subset(dating, select = comm_type))

## With verbose output
trans_data <- transformer(dating$comm_type, verbose = TRUE)
```

`translate` *Translating text*

Description

'translate' is translating text with deepl api (www.deepl.com).

Usage

```
translate(text, target_lang)
```

Arguments

text	text which should be translated.
target_lang	to which language the text should be translated. BG for Bulgarian. CS for Czech. DA for Danish. DE for German. EL for Greek. EN for English. ES for Spanish. ET for Estonian. FI for Finnish. FR for French. HU for Hungarian. IT for Italian. JA for Japanese. LT for Lithuanian. LV for Latvian. NL for Dutch. PL for Polish. PT for Portuguese. RO for Romanian. RU for Russian. SK for Slovak. SL for Slovenian. SV for Swedish. ZH for Chinese.

Source

Some code was used from the github project 'paulcbauer/deeplr', you find it here: https://github.com/paulcbauer/deeplr

Examples

```
library(ourdata)

# From German to English
translate(text = "Dies ist ein Test.", target_lang = "EN")

# Short form
translate("Dies ist ein Test.", "EN")
```

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